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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/846,133 | 05/01/2001 | Ward Thomas Brown | A01033 | 7874 |

7590 09/12/2002

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EXAMINER

CHEVALIER, ALICIA ANN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1772 | 5 |

DATE MAILED: 09/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/846,133 | BROWN, WARD THOMAS | |

| | | |
|------------------|-----------------|--|
| Examiner | Art Unit | |
| Alicia Chevalier | 1772 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 August 2002.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-17 is/are pending in the application.

4a) Of the above claim(s) 9-17 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-8 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-8 in Paper No. 4 is acknowledged.

Specification

2. The disclosure is objected to because of the following informalities: The specification lacks section headings.

Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Content of Specification

(a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.

(b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.

(c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.

(d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

(e) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:

(1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."

(2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

(f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

(g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.

(h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

(i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet (37 CFR 1.52(b)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).

(j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an

abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

(k) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term “organic super absorbent polymer” in claim 7 is unclear which renders the claim vague and indefinite. It is unclear from the specification and the claim language which materials constitute “organic super absorbent polymer.”

The term “ion-exchange resin absorber” in claim 7 is unclear which renders the claim vague and indefinite. It is unclear from the specification and the claim language which materials constitute “ion-exchange resin absorber.”

The term “hollow sphere polymers absorber” in claim 7 is unclear which renders the claim vague and indefinite. It is unclear from the specification and the claim language which materials constitute “hollow sphere polymers absorber.”

The term “molecular sieves absorber” in claim 7 is unclear which renders the claim vague and indefinite. It is unclear from the specification and the claim language which materials constitute “molecular sieves absorber.”

The term “inorganic absorber” in claim 7 is unclear which renders the claim vague and indefinite. It is unclear from the specification and the claim language which materials constitute “inorganic absorber.”

The term “porous carbonaceous materials absorber” in claim 7 is unclear which renders the claim vague and indefinite. It is unclear from the specification and the claim language which materials constitute “porous carbonaceous materials absorber.”

The term “non-porous carbonaceous materials absorber” in claim 7 is unclear which renders the claim vague and indefinite. It is unclear from the specification and the claim language which materials constitute “non-porous carbonaceous materials absorber.”

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey (4,950,525).

Bailey discloses a retroreflective sheeting comprising a spacing layer with embedded glass microspheres and a transparent polymeric front layer over the microshperes (col. 2, lines

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10-21 and col. 3, line 68). The materials of the top and spacing films or layers should be compatible with one another and adapted to form a good bond together and may further comprise ultraviolet light absorbers (col. 7, lines 47-65). The films also incorporate color such as pigment or dye (col. 10, lines 20-23). The retroreflective sheeting may be used as a marker on the pavement (col. 9, lines 30-33).

7. Claims 1 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Phillips (5,977,263).

Phillips discloses a graphic article imparted with weather protection and wear resistance which are applied to outdoor surfaces (col. 1, lines 33-42). The article comprises a binder layer with a pigment layer, a layer of glass microspheres, and a transparent cover film (col. 5, line 55 to col. 6, line 9 and figure 1). The sheeting may further comprise ultraviolet light absorbers (col. 10, lines 30-35).

8. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Klein et al. (5,882,771).

Klein discloses a retroreflective sheeting comprising an adhesive a spacing layer, a layer of glass beads, a layer of bead bond, a primer layer, a top film, and another primer layer (figure 4 and col. 4, lines 5-31). The optical primer layers are light transmissible materials which transmits more than 90% of the incident light at a given wavelength (col. 4, lines 25-31). The bead bond layer has a glass transition temperature of less than about 0 degrees Celsius (col. 2, lines 25-29). Additionally, weathering additives such as UV absorbers may be added (col. 8, line 48). Furthermore, dyes or pigments may be added to any of the layers ion the sheeting (col. 11, lines 54-59).

Claim Rejections - 35 USC § 102/103

9. Claims 2-5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Bailey (4,950,525).

Although Bailey does not explicitly teach the limitations binder polymer glass transition temperature or the percent visible light transmission of the coating, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. transparent polymers) used to produce the composite. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed glass transition temperature and percent visible light transmission would obviously have been provided by the process disclosed by Bailey. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

10. Claims 2-5 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Phillips (5,977,263).

Although Phillips does not explicitly teach the limitations binder polymer glass transition temperature or the percent visible light transmission of the coating, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. transparent polymers) used to produce the composite. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed glass transition temperature and percent visible light transmission would obviously have been provided by the process disclosed by Phillips. Note *In re Best*, 195 USPQ 433, footnote 4

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(CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey (4,950,525), Phillips (5,977,263), or Klein et al. (5,882, 771) in view of Pohto et al. (5,514,441).
Bailey, Phillips, and Klein disclose all the limitations of the instant invention except the ultraviolet light absorbers composition.

Pohto discloses a retroreflective sheeting with ultraviolet light absorbers. The ultraviolet light absorbers may comprise such useful organic materials as benzotriazole derivated, hydroxy benzophenones, etc. (col. 6, line 58 to col. 7, line 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use one of the ultraviolet light absorbers disclosed by Pohto in as the ultraviolet light absorber in Bailey, Phillips, or Klein since they useful ultraviolet light absorbers in retroreflective sheeting.

13. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable Phillips (5,977,263) or Klein et al. (5,882, 771) in view of Bailey (4,950,525).

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Phillips, and Klein disclose all the limitations of the instant invention except the composite is used on pavement.

Bailey discloses a retroreflective sheeting used as a marker on the pavement (col. 9, lines 30-33).

It would have been obvious to one of ordinary skill at the time of the invention to use either Phillips' sheet or Klein's sheet as a maker on the pavement as disclosed by Bailey since retroreflective sheeting are good pavement markers due to their high visibility.

Conclusion

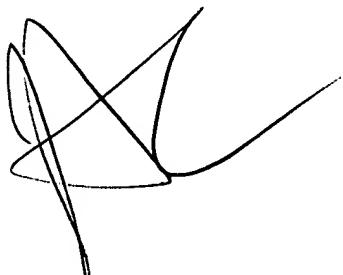
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

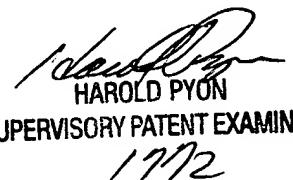
If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

9/7/02




HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

 9/8/02